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Book reviews and notices

Else C. Vellinga, *Book Review Editor**

861 Keeler Avenue, Berkeley CA 94708 U.S.A.
Correspondence to: bookreviews@mycotaxon.com

Introduction

Three totally different books are reviewed here: a beautifully illustrated French book on myxomycetes, an Indian book on the smut fungi of the subcontinent, and a well-written, popular-science introduction to mushroom forming fungi, succinctly titled 'Mushroom.'

Book announcements include the 2011 publications in the series 'Fungi non delineati,' a very nicely illustrated book on tropical fungi in China, and a checklist for all fungi and myxomycetes of Rhode Island (U.S.A.).

Myxomycetes

Les myxomycètes. By M. Poulain, M. Meyer & J. Bozonnet, 2010. FMBDS, 8, Avenue de la Plaine, 74000 Annecy, France, <philippecattin74@orange.fr>. 2 vols, pp. 1119, col. plates 544. ISBN 978-2-9518540-2-4. Price 159.00 €

As anyone who has ever studied myxomycetes knows, the monograph by Martin and Alexopoulos, published by the University of Iowa Press in 1969, represents the single most definitive treatment of this group of organisms published to date. This monograph (The Myxomycetes) has long since been out of print, but it still remains—more than 40 years after it first appeared—the standard against which any of the more recently published works on the myxomycetes are judged. The two volumes that make up Les Myxomycètes undoubtedly represent the most noteworthy recent contribution to the study of myxomycetes. Although not totally comprehensive, since some species (particularly tropical examples) are not included, this work covers virtually any species one is likely to encounter

* Books for consideration for coverage in this column should be mailed to the Book Review Editor at the address above. All unsigned entries are by the Book Review Editor.

during a lifetime of collecting. Information is provided on 853 taxa (species and varieties), and 530 of these are illustrated with color images. These images represent the most important feature of the work itself. Never before have so many high-quality (often stunning) macroscopic color images been provided for so many different myxomycetes. For anyone studying myxomycetes, this alone is reason enough to obtain a copy of Les Myxomycètes. The first of the two volumes begins with a short introduction to the biology, ecology and morphology of myxomycetes. Since the primary language used throughout the work is French, this information is not readily available to everyone. However, the remainder of the first volume is devoted to keys and short descriptions of the species being considered, and this material is presented in both French and English, which is a major plus for those of us whose knowledge of the former language is limited. The descriptions include both macroscopic as well as microscopic characters, and reference is made to the number of the image provided for a particular species in the second volume. The first volume also contains a glossary of terms, an index to all of the taxa being considered and a list of relevant bibliographical references. The nomenclature used throughout both volumes is that found in the current version of Nomenmyx (www.nomen.eumycetozoa.com), which is generally followed by most of us who work with myxomycetes.

The second volume contains the color images of the 530 taxa. The general approach used throughout is to have each page devoted to a single image that shows the habit of the species in question, but some pages contain several images of the same species. Also included are line drawings that show various microscopic structures (e.g., spores, capillitium and peridium) that are relevant to that species. Altogether, the images, drawings and descriptions provide enough information to allow most specimens of myxomycetes to be identified with a high degree of certainty. Since the authors are especially well known for their studies of nivicolous ("snowbank") myxomycetes, there is extensive coverage of this group. In fact, information on some of the nivicolous taxa they have included in this work was available previously only in the primary literature. The majority of the color images are truly outstanding, and the only complaint that anyone might have is that in a few instances (e.g., *Physarum pusillum*) the specimen photographed might not have been absolutely typical for a given species. I found the images of the various species of *Licea* particularly well done and thus potentially very useful when working with members of this genus.

Overall, Les Myxomycètes is an extraordinary work that is the result of an enormous amount of time and effort on the part of the three authors. Simply looking through the color images in the second volume is enjoyable, but the complementary information provided in the first volume makes this an

exceedingly useful scientific work on the myxomycetes. Anyone with even the slightest interest in this group of organisms should have a copy of this work.

Steven L. Stephenson
Department of Biological Sciences, University of Arkansas
Fayetteville, Arkansas 72701, U.S.A.
slsteph@uark.edu

Ustilaginales

***Ustilaginales* of India.** By R.V. Gandhe, 2011. Bishen Singh Mahendra Pal Singh, 23-A, New Connaught Place, Dehra Dun, 248001 India, <bsmps@vsnl.com>. ISBN 978-81-211-0788-4. Pp. 414, col. pl. 22, figs. Price circa US$ 154

Dedicated to 'the doyen of mycology in India' the late Professor M.J. Thirumalachar, this book gives an overview of the *Ustilaginales* (s.l.) species in India.

The economically important smut fungi of crop plants and the smut fungi of native plants are treated in this book. It gives descriptions of 343 species in 45 genera, several of them new for science (e.g., three new *Sorosporium* species and two new *Sphacelotheca* species), the genera and species per genus are treated in alphabetical order. The genus *Sporisorium* is the largest, represented by 96 species, followed by *Tilletia* with 46, and *Ustilago* with 42.

Besides an introduction to smut fungi and coverage of their economic importance, diversity, and morphological variations, a useful host index is provided.

The author, who has spent 2 decades studying smut fungi and especially their germination patterns, places a strong emphasis on morphotaxonomy and symptomatology, and although in many cases descriptions are literally the same as in Vánky (2007), morphological characters have been added to the keys. The illustrations entail eight colour plates and over 50 drawings of infected plants, spores, and germinating spores.

The book makes the impression of having been written at the same time as Vánky's treatment of the smut fungi of the Indian subcontinent was published, although that publication is lacking from the list of references. There are no post-2007 publications cited, not even the phylogenetic paper by Begerow et al. (2007). The illustrations in Vánky's 2007 work are of higher quality than the ones in the present book, but I doubt whether the former is easily available in India, where it should be used.

Begerow D, Stoll M, Bauer R. 2007 ['2006'] A phylogenetic hypothesis of *Ustilaginomycotina* based on multiple gene analyses and morphological data. Mycologia 98: 906–916.

Vánky, K. 2007. Smut fungi of the Indian Subcontinent. Polish Botanical Studies 26.

Miscellaneous

Mushroom. By N.P. Money, 2011. Oxford University Press, 198 Madison Avenue, New York, NY 10016, U.S.A. <www.oup.com>. ISBN 978-0-19-973256-2. Pp. 201, col. pl. 16, figs. Price US$ 24.95

In eight chapters the reader is given a dazzling, fast-spaced and thorough introduction into the development of mushrooms (including life cycles), spore launching, diversity in shape and function, edible mushrooms and conservation, mushroom cultivation, toxicity, intoxication, and the medicinal mushroom industry. The text moves back and forth between the author's experiences in the England of his youth and present-day life, science, and economics and yet is always anchored safely in the writings and illustrations of the scientists of the past. Central to all is the biology of the mushroom, as masterpiece of bioengineering. It is by no means a text book or field guide. Nonetheless, Mushroom gives a huge amount of information in its 200 pages, makes for excellent reading, and would be a good present to friends, family, and all who are intrigued by nature.

Book Announcements

Characteristic and rare species of gasteromycetes in Eupannonicum. By I. Rimóczo. M. Jeppson & L. Benedek, 2011. Fungi non delineati 56-57. Edizioni Candusso, Via Ottone Primo 90, 17021 Alassio SV, Italy. <maxcandusso@libero.it>. Pp. 230, col. plates 108, figs. Price 28.00 €

***Cortinarius* Ibero-insulares – 3.** By Grupo Iberoinsular de Cortinariologos (GIC), 2011. Fungi non delineati 58-59. Edizioni Candusso, Via Ottone Primo 90, 17021 Alassio SV, Italy. <maxcandusso@libero.it>. Pp. 236, col. plates 236. Price 33.00 €

Fungi of tropical China. By W. Xingliang et al., 2011. Chinese Corporation for Promotion of Humanities. ISBN-13: 9787030294708. Pp. 548, col. plates 495. Price circa US$ 220

***Inocybe* dai litorali alla zona alpina.** By E. Ferrari, 2011. Fungi non delineati 54-55. Edizioni Candusso, Via Ottone Primo 90, 17021 Alassio SV, Italy. <maxcandusso@libero.it>. Pp. 216, col. plates 106, figs 69. Price 23.00 €

Mycota of Rhode Island: A checklist of the fungi recorded in Rhode Island (including lichens and myxomycetes). By R.D. Goos, 2010. The Biota of Rhode Island vol. 4. Rhode Island Natural History Survey, P.O. Box 1858, Kingston, RI 02881, <programadmin@rinhs.org>. ISBN 1-887771-09-3. Pp. 228. Price US$60.00

Rare and noteworthy species of agarics from the western Caucasus. By E.F. Malysheva & T. Yu. Svetasheva, 2011. Fungi non delineati 60. Edizioni Candusso, Via Ottone Primo 90, 17021 Alassio SV, Italy. <maxcandusso@libero.it>. Pp. 104, col. plates 45. Price 12.00 €